

Remarks/Arguments:

Prior to the instant amendment, claims 1-27 were pending in the application of which claims 1-16 and 26 stand rejected and claims 17-25 and 27 are withdrawn from further consideration as being drawn to non-elected subject matter. Applicants have hereby amended the claims canceling claim 2, amending the claims to correct typographical errors- "pharmaceutically salts" was corrected in the claims to read "pharmaceutically-acceptable salts" consistent with claim 1 and the spelling of "substituent" was corrected in various places in the claims- and claim 17 was amended so it is dependent on claim 1, so it includes pharmaceutically-acceptable salts as claimed in claim 1, and to delete those compounds from claim 17 which do not fall within the scope of amended claim 1.

The above amendments have been made without prejudice to Applicants right to prosecute any cancelled subject matter in a timely filed continuation application.

It is noted the restriction requirement has been maintained.

In view of applicants response to the restriction requirement and their election of species, the examiner states that "the invention will encompass all compounds that fall within the scope of the claim [is] as follows:

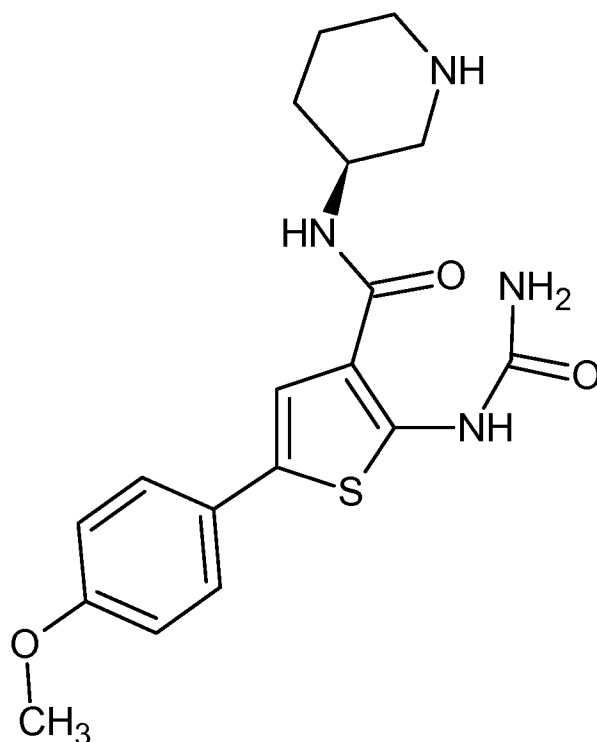
A compound having the formula (I) wherein:

R¹ and R² and the N to which they are attached in combination form an optionally substituted heterocyclyl;

R⁴ is as claimed and

R⁵ is as claimed."

Applicants respectfully take issue with this. Applicants election of species was to the compound of example 4, i.e. 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3S)-piperidin-3-yl]thiophene-3-carboxamide having the structure



This compound does not fall within the definition of R^1 and R^2 as set forth by the examiner. Applicants believe the examiner had intended the definitions of R^1 and R^2 to be the following

R^1 is an optionally substituted heterocyclyl;

R^2 is selected from H, optionally substituted C_{1-6} alkyl, or optionally substituted heterocyclyl.

These definitions are consistent with the election of species and with the examiner's search strategy. Accordingly, applicants have amended that claims consistent with the immediately above definitions of R^1 and R^2 by incorporating the limitation of claim 2 into claim 1 and canceling claim 2.

Claim 17 has been rewritten in dependent form so that it now depends from claim 1. Claim 17 reads on the elected species. In view of this applicants respectfully request that claim 17 be reconsidered and made a part of the elected invention.

Claims 1-16 and 26 stand rejected under 35 USC §103(a) as being unpatentable over Baxter *et al* and further in view of Parrish *et al* (2003). Applicants believe the Parrish *et al* reference the examiner is referring to is WO 03/029241. If that is not the case, please correct applicants.

It is the examiner's position that "the difference between the claimed compounds and that of the references lies in the selection of different variable substitutions on the core thiophene ring, such as having an alkyl (methyl) group substitution for R² or R⁵ in the instantly claimed compounds instead of hydrogen for the same position in the prior art compounds [assuming R¹ and R⁴ are either hydrogen or alkyl]" and "since it is well established that substitution of alkyl (such as methyl) for hydrogen on a known compound is not a patentable modification absent unexpected or unobvious results" the instant invention is not patentable over the references.

Applicants respectfully traverse the examiner's position. The instant claims require that R¹ is an optionally substituted heterocycle. While such compounds may be generically disclosed in Parrish *et al*, there is no example of such a compound nor is there any teaching or suggestion which would motivate one of skill in the art to choose an optionally substituted heterocycle for R¹. The Baxter *et al* reference does not make up for the deficiency. Baxter *et al* teaches only H and methyl for R¹. The Federal Circuit recently held that to prove *prima facie* obviousness for chemical cases based on structural similarity, "a showing that the prior art would have suggested making the specific molecular modifications necessary to achieve the claimed invention is also required." [*Takeda Chem. Indus. et al. v. Alphapharm et al.*, No. 06-1329 (Fed. Cir. 2007, "Thus, in cases involving new chemical compounds, it remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner to establish *prima facie* obviousness of a new claimed compound.")]

In view of the foregoing, applicants respectfully submit that the instantly claimed invention is patentable over the references.

The objection of claims 1-16 and 26 for containing non-elected subject matter is submitted to have been overcome by the instant amendment.

Accordingly, Applicants believe the application is in condition for allowance, which action is respectfully requested.

Application No. 10/568,380
Amendment Dated March 7, 2008
Reply to Office Action of September 10, 2007

Although Applicants believe no fees are due, the Commissioner is hereby authorized to charge any deficiency in the fees or credit any overpayment to deposit account No. 50-3231, referencing Attorney Docket No. 101064-1P-US.

A petition for a three month extension of time is being filed herewith, the Commissioner is hereby authorized to charge any deficiency in the fees or credit any overpayment to deposit account No. 50-3231, referencing Attorney Docket No. 101064-1P-US.

Respectfully submitted,

/Carol A Loeschorn/

Name: Carol A Loeschorn
Dated: March 7, 2008
Reg. No.: 35,590
Phone No.: 781-839-4002
Global Intellectual Property, Patents,
AstraZeneca R&D Boston,
35, Gatehouse Drive,
Waltham,
MA 02451